

July 2015

Ford County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 18 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Ford County economy.¹ These 18 sectors have a total direct output of approximately \$4525 million and support 7,635.2 jobs in Ford County. Running the model for all 18 sectors simultaneously produces the following results:

Agriculture Contribution in Ford County

Impact Type ²	Employment	% of Total Employment	Total Value Added ³	% of Gross Regional Product ⁴	Output ⁵	% of Gross Regional Product
Direct Effect	7,635.2	33%	\$734,829,894	41%	\$4,524,676,519	256%
Indirect Effect	1,828.0	8%	\$144,980,619	8%	\$275,399,051	16%
Induced Effect	1,883.7	8%	\$132,709,941	7%	\$229,812,569	13%
Total Effect	11,346.9	50%	\$1,012,520,454	57%	\$5,029,888,139	284%

As shown in the above table, agriculture, food, and food processing supports 11,346.9 jobs, or 50% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$5030 million, roughly 284% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 18 agriculture, food, and food processing sectors is approximately \$1013 million, or 57% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 57% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:
https://implan.com/index.php?option=com_content&view=category&id=19

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

⁴ GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

⁵ Output = Intermediate Inputs + Value Added

In the top ten by employment, Animal, except poultry, slaughtering is the top employer in the agriculture industry with 6,548.0 employees. This table also shows the amount of jobs that are created by the agriculture industry in Ford County.

Top 10 Industries Affected by Employment

Sector Description:	Total Employment	Total Output
Animal, except poultry, slaughtering.....	6,548.0	\$3,992,980,374
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	499.2	\$220,842,634
Wholesale trade.....	459.8	\$97,345,737
Truck transportation.....	384.7	\$52,950,157
Limited-service restaurants	195.6	\$11,610,462
Full-service restaurants	179.1	\$7,877,677
Grain farming	170.9	\$102,161,478
Farm machinery and equipment manufacturing	168.1	\$102,991,634
Services to buildings	111.0	\$6,521,963
Real estate.....	99.6	\$15,354,561

The Animal, except poultry, slaughtering industry directly contributes approximately \$3993 million to Ford County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

Sector Description:	Total Employment	Total Output
Animal, except poultry, slaughtering.....	6,548.0	\$3,992,980,374
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	499.2	\$220,842,634
Farm machinery and equipment manufacturing	168.1	\$102,991,634
Grain farming	170.9	\$102,161,478
Wholesale trade.....	459.8	\$97,345,737
Truck transportation.....	384.7	\$52,950,157
Flour milling.....	28.6	\$43,895,421
Owner-occupied dwellings	0.0	\$41,206,433
Other animal food manufacturing.....	13.8	\$20,448,335
All other crop farming.....	93.3	\$20,221,753

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Ford County's economy.

[illegible]

All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.